



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

11/1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,599	02/06/2002	Norio Kashiwa	ZU-408	5429
21839	7590	02/27/2004		
			EXAMINER	
			LEE, RIP A	
			ART UNIT	PAPER NUMBER
			1713	

DATE MAILED: 02/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/066,599	KASHIWA ET AL.	
	Examiner Rip A. Lee	Art Unit 1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on December 11, 2003.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) 4,5,10 and 11 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3 and 7-9 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 1-5 and 7-11 are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,278,272 to Lai *et al.* for the same reasons set forth in the previous office action. Notably, Lai *et al.* teaches ethylene polymers having a density of from about 0.85 to about 0.97 g/cm<sup>3</sup>, a melt flow ratio,  $I_{10}/I_2$  of from about 7 to about 20, and a molecular weight distribution,  $M_w/M_n$  from about 1.5 to about 2.5.

5. Claim 3 is rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,300,433 to Rodriguez *et al.* for the same reasons set forth previously. Briefly, Rodriguez *et al.* teaches ethylene polymers have a density of 0.850-0.930 g/mL. Tables 1 and 2 show molecular weight distributions generally exhibited by the polymers of the invention, and it can be seen that value of  $M_w/M_n$  lie in the range of about 2.22 to about 9.39. The reference is silent with respect to the ratio  $\omega_2/\omega_1$ . However, in view of the fact that the polymers described in Rodriguez *et al.* are prepared by catalysts comprised of essentially the same components as those described in the instant application, a reasonable basis exists to believe that the prior art polymers exhibit the currently claimed property,  $\omega_2/\omega_1$ . Since the PTO can not conduct experiments, the burden of proof was shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rodriguez *et al.* for the same reasons set forth in the previous office action.

### ***Response to Arguments***

7. Applicants traverse the rejection of claims 1, 2, 7, and 8 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,278,272 to Lai *et al.* Applicants indicate that the prior art does not teach the claimed subject matter with “sufficient specificity”<sup>†</sup> to constitute an anticipation under the statute. Their supporting arguments lies in the fact that the working examples in the patent have densities which lie outside the scope of the present claims. In addition, Applicants assert that the substantially linear polymers contemplated by the reference encompasses several hundred types of polymer.

Applicants do not deny the fact that there is substantial overlap of claimed ranges. The prior art teaches a density which encompassed the claimed density range, and it teaches  $M_w/M_n$  which lies squarely within the claimed range. The overlapping range which appears to be the item of concern is  $I_{10}/I_2$  ratio. As shown in *Ex parte Lee*, the teaching of an overlapping range was “sufficient specificity” for anticipatory subject matter, even though the examples did not show a specific working example.

Regarding Applicants’ concern that the working examples in the patent do not meet limitations of the present claims, it is noted that a reference must be considered in its entirety and

---

<sup>†</sup> Applicants quote MPEP § 2131.03 regarding the notion of “sufficient specificity.” The MPEP cites *Ex parte Lee*, 31 USPQ 1105. Here, the board upheld the examiner’s rejection under 35 USC 102 in which a claim for a polyolefin resin having melt index of less than about 5 g/10 min was anticipated by the prior art which disclosed a polyolefin having a preferred melt index in the range of 0.1-40 g/10 min.

that the disclosure of a reference is not limited to preferred embodiments or specific working examples contained therein. *In re Lamberti*, 545 F.2d 747, 750 192 USPQ 278, 280 (CCPA 1976). This line of reasoning do not overcome the fact that Lai *et al.* teaches ethylene polymer having a density of from about 0.85 to about 0.97 g/cm<sup>3</sup>, a melt flow ratio,  $I_{10}/I_2$  of from about 7 to about 20, and a molecular weight distribution,  $M_w/M_n$  from about 1.5 to about 2.5.

8. Applicants traverse the rejection of claim 3 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 6,300,433 to Rodriguez *et al.* Applicants are silent with regard to the notion that the density and polydispersity of ethylene polymers disclosed in the prior art lie within the limits set forth in the present claims. Applicants submit that the polymers actually prepared in the examples have a high melt index and correspondingly, relatively high molecular weights. The data reinforces this fact, despite the fact that the present materials exhibit relatively high MFR<sub>2</sub> values. Furthermore, Applicants have not met the burden of proof of establish unobviousness differences with respect to  $\omega_2/\omega_1$  values.

9. With respect to the traversal of claim 9 under 35 U.S.C. 103(a) as being unpatentable over Rodriguez *et al.*, there is no showing why the skilled artisan would not find it obvious to make materials by injection molding since such a process is implicated in the reference.

10. In view of the discussion above, the rejections of record have not been withdrawn.

***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

ral

February 23, 2004



DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700